

SLOVENIA

1. Competitive environment

Coverage	SI-2015	SI-2016	EU-2016
Fixed broadband coverage (total)	95%	98%	98%
Fixed broadband coverage (rural)	90%	92%	93%
Fixed NGA coverage (total)	81%	82%	76%
Fixed NGA coverage (rural)	50%	50%	40%
4G coverage (average of operators)	no data	94%	84%

Source: Broadband Coverage Study (IHS and Point Topic). Data as of October 2015 and October 2016.

Fixed broadband market

Slovenia has made good progress on fixed broadband coverage, which at 98% is now in line with the EU average. It has also made some progress in rural areas on fixed broadband coverage and is now just below the EU average (92% versus 93%). In terms of next-generation access (NGA) coverage Slovenia continues to perform above the EU average (82% versus 76%). Although performing above the EU average on NGA coverage in rural areas (50% versus 40%), Slovenia is stagnating in this area in the reporting period. While good progress was made on the percentage of households subscribing to a fast connection (over 30Mbps) (from 6% to 12%) and those subscribing to an ultra-fast connection (over 100 Mbps) (from 7% to 12%), Slovenia remains well below the EU average on subscriptions for fixed fast broadband with over 30 Mbps (24% against an EU average of 37%).

Fixed broadband market shares	SI-2015	SI-2016	EU-2016
Incumbent market share in fixed broadband	34.3%	32.9%	40.7%
Technology market shares			
DSL	43.4%	40.3%	66.8%
Cable	30.1%	31.2%	19.1%
FTTH/B	24.4%	26.5%	10.7%
Other	2.1%	2.0%	3.4%

Source: Communications Committee. Data as of July 2015 and July 2016.

The fixed broadband market share of the incumbent Telekom Slovenije at 32.9%, significantly below the EU average (40.7%) with its market shares in decline. Its xDSL-based offers have decreased (from 43.4% to 40.3%) and are significantly below the EU average (66.8%). The share of cable connections (DOCSIS 3.0) is growing slightly, currently standing at 31.2%, above the EU average (19%). The share of FTTH/B¹ technology is significantly above the EU average (26.5% versus 10.7%) and has been increasing over the last year. The incumbent is upgrading its networks by deploying GPON as well as by shortening local loops and is also testing vectoring technologies. The VoIP² market continues to grow, already reaching a 73% market share on the fixed telephony market.

¹ Fibre-to-the-home/building, business or basement.

² Voice-over internet protocol

New entrants' DSL subscriptions by type of access (VDSL excluded)	SI-2015	SI-2016	EU-2016
Own network	-	-	0.7%
Full LLU	40.8%	38.9%	75.3%
Shared access	4.8%	3.3%	4.1%
Bitstream	54.4%	57.9%	13.4%
Resale	-	-	6.6%

Source: Communications Committee. Data as of July 2015 and July 2016.

Charges of Local Loop Unbundling (monthly average total cost in €)	SI-2015	SI-2016	EU-2016
Full LLU	9.1	9.1	9.2
Shared Access	4.4	4.4	2.4

Source: Communications Committee. Data as of October 2015 and October 2016.

According to, the national regulatory authority, AKOS³ services that include bundle offers are steadily increasing. Quadruple play offers are often cheaper than other multiple play offers (triple play, double play). The majority of bundle subscriptions contain TV/content services (IP or cable). The incumbent is losing its market share on bundles compared to cable and other alternative operators. All three types of operators have grown their user numbers but the increase is higher for cable operators.

Market consolidation continued in Slovenia during 2016. Si.mobil took over Amis and TA mreža. The incumbent took over Debitel, while Telemach finalised the acquisition of Telemach Mobil. Slovenia has now four operators who have converged.

Mobile market

Mobile market	SI-2015	SI-2016	EU-2016
Market share of market leader	47%	47%	34%
Market share of second largest operator	30%	30%	28%
Number of mobile network operators (MNOs)	4	4	-
Number of mobile virtual network operators (MVNOs)	3	4	-
Market share of MVNOs (SIM cards)	7%	3%	-

Sources: Communications Committee. Data as of October 2015 and October 2016;

The market shares in the mobile market of the incumbent as well as of the second largest operator are stagnating. In 2016, three new MVNOs entered the market; however one has not launched commercial services yet.

While 4G coverage is significantly higher than the EU average (94% versus 84%), the take-up of mobile broadband services is significantly below the EU average (57% versus 84%).

Mobile broadband prices	SI-2015	SI-2016	EU-2016
Least expensive offer for handset (1 GB + 300 calls basket)	28	18	30
Least expensive offer for tablet and laptop (5 GB basket)	12	15	18

Source: Mobile Broadband Price Study (Van Dijk). Prices expressed in EUR/ purchasing power parity VAT included. Data as of February 2015 and February 2016.

³ Agencija za komunikacijska omrežja in storitve Republike Slovenije

While prices for mobile broadband on handsets went down and are significantly below the EU average, the lowest fixed broadband price (12-30 Mbps or above) is €34.77, compared to €21.33 at EU level⁴. Offers for mobile broadband on tablets and laptops are below the EU average.

2. Supporting measures for deployment and investment in high-speed networks

a. Spectrum

Harmonised band	MHz spectrum assigned ⁵	% of the harmonised band assigned
700 MHz	0	0%
800 MHz	60	100%
900 MHz	70	100%
1500 MHz	0	0%
1800 MHz	150	100%
2000 MHz paired	120	100%
2600 MHz	190	100%
3400-3600 MHz	40	20%
3600-3800 MHz	0	0%

Overall broadband has been assigned 57.8%⁶ of the overall harmonised spectrum in Slovenia. In 2016 the remaining parts of the 1800/2100 MHz bands were assigned via auction. The operator Telemach was assigned 2 blocks of 2 x 5 MHz in the 1800 MHz band and 2 x 5 MHz in the 2100 MHz band. The final price was €2.6 million for each 1800 MHz block and €1.35 million for the 2100 MHz block.

In cooperation with the Ministry of Public Administration, AKOS published the call for tenders to stakeholders to send in proposals for 5G projects, indicating the segment of the economy/society for which the project would be primarily intended. The 3430-3500 MHz and 3530-3800 MHz frequency bands will be assigned for 5G projects, depending on results of the call. Preference would be given to projects which involve partners from neighbouring and other European countries.

The 700 MHz band is no longer used for broadcasting and should be assigned for wireless broadband. However neighbouring countries still use the 700 MHz band for broadcasting, which may cause future interference. Initial preparations for the 700 MHz auction have been suspended in the light of the strategic guidance from the Ministry, which stated that this band

⁴ Source: Fixed broadband prices in Europe in 2016 (Empirica). Prices expressed in EUR/purchasing power parity, VAT included. Data as of autumn 2016.

⁵ Including guard bands.

⁶ This percentage slightly differs from the one used in the EDPR country profile following feedback from the authorities concerned and reflected in the above table.

should not be auctioned in 2016. The guidance stipulated that it should instead be auctioned as a part of a multiband auction of the 1400 MHz and parts of the 2300 MHz bands in 2018. Slovenia is also participating in multilateral activities to re-plan the sub-700 MHz band for digital TV broadcasting in order to take into account the repurposing of the 700 MHz band.

b. EU and national investments in broadband

Slovenia's 2015 broadband strategy, the 'plan for the development of next-generation broadband networks until 2020', (the NGN Development Plan–2020) was updated and approved by the Government in early March 2016⁷ and amended in December 2016⁸. According to this amendment Slovenia's broadband targets aim to equip 100% of households with broadband internet access with speeds of at least 100 Mbps by 2020. The NGN Development Plan–2020 follows the EU 2020 strategy and is in line with the digital agenda. In this context, the NGN Development Plan–2020 sets strategic objectives in the field of broadband infrastructure and lays down the strategic basis for using funds from the European Regional Development Fund and the European Agricultural Fund for Rural Development. Under the strategy, planned costs for developing broadband networks for high-speed access are €365 million. The cost of deploying broadband infrastructure at a speed of 100 Mbps in areas with a high density population is estimated at €290 million. Active equipment costs an estimated €65 million. Co-financing with public funds will be limited to connection costs. In areas with low population density the public-private partnership is entitled to co-financing in the amount of EUR 1,200 per line, while in the geographic segment with high population density the public-private partnership is entitled to co-financing in the amount of €1,000 per line.

For the financing period 2014-2020 €57.52 million in EU funds is to be used to deploy broadband over 100 Mbps. This includes: €50.02⁹ million from the European Regional Development Fund (ERDF Operational Programme), €12.5 million of national co-financing. €7.5 million from the European Agricultural Fund for Rural Development (EAFRD Programme) with a further €2.5 million of national co-financing.

c. State of transposition of the Broadband Cost Reduction Directive

Following the expiry of the deadline for transposing the Broadband Cost Reduction Directive (BB CRD) on 1 January 2016, the Commission has opened infringement proceedings against Slovenia for its failure to notify transposition measures. In 2015 Slovenia adopted measures on the bylaws of the Cadastre communications network and associated infrastructure.

⁷http://www.mju.gov.si/fileadmin/mju.gov.si/pageuploads/DID/Informacijska_druzba/NGN_2020/NGN_2020_Slovenia_EN.pdf

http://www.mju.gov.si/fileadmin/mju.gov.si/pageuploads/DID/Informacijska_druzba/NGN_2020/NGN_2020_Slovenia_EN.pdf

⁸http://www.mju.gov.si/fileadmin/mju.gov.si/pageuploads/DID/Informacijska_druzba/NGN_2020/Sezn_BL_NGN2020_Sklep_VRS_01122016.doc

⁹ Following the adoption of the NGN Development Plan–2020 SI authorities tested the market interest and the investors expressed significant market interest which led to a reduction of the planned ERDF funds for broadband deployment. While the current ERDF Operational Programme version indicates €50.02 million, the NGN Development Plan–2020 was modified and now states that approximately €34.7 million will be needed to cover all the white spots from the ERDF. The ERDF Operational Programme should be amended accordingly in mid-2017.

Remaining national measures are still being finalised, in particular the Act amending the Electronic Communications Law.

3. Regulatory function

The term of office of the previous Head of AKOS expired in October 2016, but proceedings to appointment a new head have been delayed. AKOS is currently operating with an acting head.

In 2016, AKOS notified to the Commission the decision on wholesale markets for call termination on individual public telephone networks at a fixed location and on voice call termination on individual mobile networks (markets 1 and 2) amending the non-discrimination obligation to exclude from its scope all calls originating outside the EEA. This included calls routed by EEA operators from a non-EEA country. Instead of being subject to regulated termination rates, calls from a non-EEA country will be subject to commercial agreements between interconnected operators as AKOS only regulates termination rates for EEA traffic. AKOS also notified to the Commission the decision for modification of price remedies on market for broadband wholesale access (ex-market 5 of the 2007 Recommendation¹⁰).

AKOS also notified to the Commission the decision on market deregulation for broadcasting transmission services, to deliver broadcast content to end-users (market 18 of the 2003 Recommendation¹¹). There is a significant delay in market analyses of the following markets: wholesale local access provided at a fixed location (3a), wholesale central access provided at a fixed location for mass-market products (3b) and wholesale high-quality access provided at a fixed location(4), regarding which the Commission launched investigations in 2015 due to the three-year review period having elapsed. According to the stakeholders, the delay in market analyses has adverse effects on competition. According to AKOS, the final decisions on these markets should be taken in the first quarter of 2017.

Ex-market 1¹² of the 2007 Recommendation¹³ is still regulated.

In 2016, AKOS issued 16 regulatory decisions in the field of *ex ante* regulation, namely 4 decisions on wholesale voice call termination on individual mobile networks (market 2) and 12 decisions on the wholesale markets for call termination on individual public telephone networks provided at a fixed location (market 1). There was one appeal lodged regarding a decision on wholesale voice call termination on individual mobile networks.

¹⁰ Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 344, 28.12.2007, p. 65.

¹¹ Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services.

¹² Access to the public telephone network at a fixed location for residential and non-residential customers.

¹³ Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 344, 28.12.2007, p. 65.

For both fixed and mobile termination rates, AKOS applies a pure BU-LRIC cost-accounting model in accordance with the 2009 Termination Rates Recommendation. Call termination on individual public telephone networks provided at a fixed location is €0.0876 per minute, while the price control and cost accounting for voice call termination on individual mobile networks is €0.00114 per minute.

4. Consumer issues

In 2016, AKOS received a total of 796 of consumer complaints, slightly less than in 2015 (820). The main source of complaints (45%) still concerns disputes related to invoicing for services not being purchased/ordered. The other major source of complaints relates to disputes related to billing for services and/or any other costs deriving from contractual terms (disputes about costs for termination of the contract and/or refund of terminal equipment) (31%), followed by disputes related to incorrect data with respect to the account number, tariffs, the name of the service or the amounts charged and also double invoicing/billing (10%). Other issues include: quality of service, access issues, as well as misleading advertising.

Number portability		2015	2016
Fixed	Number of transactions ^[1]	32,207	52,208
	Transactions as a % of total numbers ^[1]	2.4%	4.1%
	Maximum wholesale price ^[2]	-	-
	Maximum time under regulation (number of working days) ^[2]	1	1
Mobile	Number of transactions ^[1]	81,795	159,125
	Transactions as a % of total numbers ^[1]	3.5%	6.7%
	Maximum wholesale price ^[2]	-	-
	Maximum time under regulation (number of working days) ^[2]	1	1

[1] Source: Communications Committee. Data as of January to September 2015 and January to September 2016.

[2] Source: Communications Committee. Data as of October 2015 and October 2016

Bundles

The need for consumers to perceive their contracts as transparent and clear is even more important given the increasing use of complex products in the market. 68% of Slovenian consumers believe they can easily compare bundled offers, which is in line with the EU average¹⁴.

Transparency

83% of respondents in Slovenia claim monitoring and keeping control over mobile phone usage is easy (EU average 69%) while for fixed only 63% of respondents believe this is the case (EU average 71%). The rate of satisfaction with contract information is 87%, above the EU average of EU 84%. AKOS has a tool for monitoring speed and some other QoS

¹⁴ <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/72564>

parameters (delay, latency, some net neutrality parameters: HTTP test, proxy test, DNS test, VoIP test, trace route test, NDT test)¹⁵.

In 2016, AKOS commenced an awareness-raising project aimed at protecting end-users and minimising disputes between them and operators. Activities include: publishing FAQs on AKOS' website, responding to end-users' enquires, providing information to end-users who can dial a toll-free number, round tables with operators, issuing recommendations, publishing brochures in order to raise the end-users' awareness.

AKOS issued a Recommendation on the transparency of administrative costs. This aimed to unify operators' terminology on administrative costs, so that these are presented to end-users in a clearer and more easily accessible manner.

Roaming

In the first quarter of 2016 in Slovenia, the average retail Eurotariff price for roaming was €0.087 per minute for outgoing calls (lower than the EEA average of €0.112 per minute), 0.028 EUR/min for incoming calls (higher than EEA average of €0.026 per minute) and €0.042 per text message (lower than EEA average of €0.047 per text message). As regards data, the price was €0.038 per MB (below the EEA average of €0.047 per MB)¹⁶

In line with the Decree on the implementation of the Regulation (EC) of the EP and the Council on roaming on public mobile telephone networks within the Community,¹⁷ in case of infringements of Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union as amended by Regulation (EU) No 2015/2120 AKOS can impose administrative fines between €50,000 and €125,000 on operators with annual revenue above €200 million, fines between €20,000 and €50,000 on operators with annual revenue between €50 and €200 million, and fines between €10,000 and €20,000 on operators with annual revenue below €50 million. Moreover, the Decree provides imposition of fines on responsible individuals in the companies ranging between €1,000 and €4,100.

Net neutrality

Article 6 of the Telecom Single Market (TSM) Regulation (Regulation (EU) 2015/2120) requires Member States to lay down the rules on penalties applicable to infringements of Articles 3, 4 and 5'. On 25 April 2016 the Slovenian authorities published the Ordinance on the application of the TSM Regulation laying down the rules on penalties in line with the TSM Regulation. In particular, this Ordinance stipulates the administrative fines for infringements of Articles 3, 4 or 5 of the TSM Regulation¹⁸. Maximum fines are €15,000 for an undertaking and €50,000 for a medium or large undertaking and responsible individuals in the companies ranging between up to €2,000.

112 and access for disabled end-users to emergency services

According to the last Communications Committee (COCOM) 112 Implementation Report, calls to the emergency number 112 are answered within 4.48 seconds, with 100% of calls

¹⁵ <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/72564>

¹⁶ International Roaming BEREC Benchmark Data Report October 2015 — March 2016, BoR (16) 160.

¹⁷ Official Gazette of Republic of Slovenia, No. 55/13 and 28/16

¹⁸ <http://www.uradni-list.si/1/objava.jsp?sop=2016-01-1179>

answered within 10 seconds, with both figures an improvement on 2015. In addition to Slovenian, the calls can be answered in English and in certain areas they can also be answered in Italian and Hungarian. Disabled users can alternatively access WAP 112 and SMS 112s in emergencies.

5. Conclusion

Slovenia is doing well on fixed and mobile broadband coverage. Completing the transposition of the Broadband Cost Reduction Directive could further support investments in infrastructure. However, Slovenia is well below the EU average regarding take-up of fixed fast broadband above 30 Mbps (24% against 37% EU average). On the demand side, measures could be taken to stimulate the use of mobile broadband and fast broadband.